

A NEW SPECIES OF *LASIOSEIUS* BERLESE
(ACARINA : BLATTISOCIDAE)
FROM MITE CULTURE¹⁾

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Recently, some specimens of a mite found in a laboratory culture of the bulb mite, *Rhizoglyphus echinopus* (FUMOZE et ROBIN), were forwarded to the writer for determination from Dr. Kikuo SHIBATA, Faculty of Agriculture, Niigata University. This mite, identified with an undescribed species of the genus *Lasioseius* BERLESE, 1916, is described below.

***Lasioseius japonicus* n. sp.**

(Jap. Name : Shibata-mayoidani)

(Pl. V)

Female. Dorsal shield reticulate, with 36 pairs of setae, 21 on the anterior region. Setae on dorsal shield arising from small tubercles, more or less flanged except for slender paraverticals: some caudal setae of S and Z series (usually, S₄, S₅, Z₄, Z₅) flanged and serrate, thickened; setae of J series shorter than distances between bases, seta J₅ serrate, hardly flanged, subequal in length to other J setae. Nine pairs of flanged marginal setae on interscutal membrane, two in anterior region. Peritreme not extending to vertical setae; peritrematal plate fused posteriorly to exopodal plate. Endopodal plates conspicuous in region of coxae III and IV. Sternal shield with anterior margin indistinct, with three pairs of setae; each metasternal platelet with a minute pore near anterior end. Genital shield with minute, elongate punctures; the caudal margin approximately linear. Four elongate platelets imbedded under surface between genital and ventrianal shields. Ventrianal shield large, wider than long, much wider than genital shield, reticulate, punctate posteriorly, with six pairs of preanal setae. Three pairs of setae surrounding ventrianal shield, seta VL₁ noticeably larger, flanged. Two pairs of metapodal platelets, the anterior pair triangular to nearly circular,

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the posterior pair much larger and elongate; a minute platelet lying posterior to each posterior metapodal platelet. Fixed digit of chelicera usually with 16 teeth, the movable digit with three teeth. Tectum as figured. Rostral setae and internal posterior rostral setae long. Distitarsus II with two long, slender setae; distitarsus III with a pair of long, slender setae; distitarsus IV with one dorsal and one ventral long, stout setae, and with one lateral long, slender seta; basitarsus IV with two long, stout dorsal setae. Measurements in microns: idiosoma length 530, idiosoma width 310; lengths of setae: verticals 26, humerals 50, J₄ 41, J₅ 36, Z₄ 58, Z₅ 64, S₄ 50, S₅ 55, VL₁ 43, lateral long seta on distitarsus IV 47.

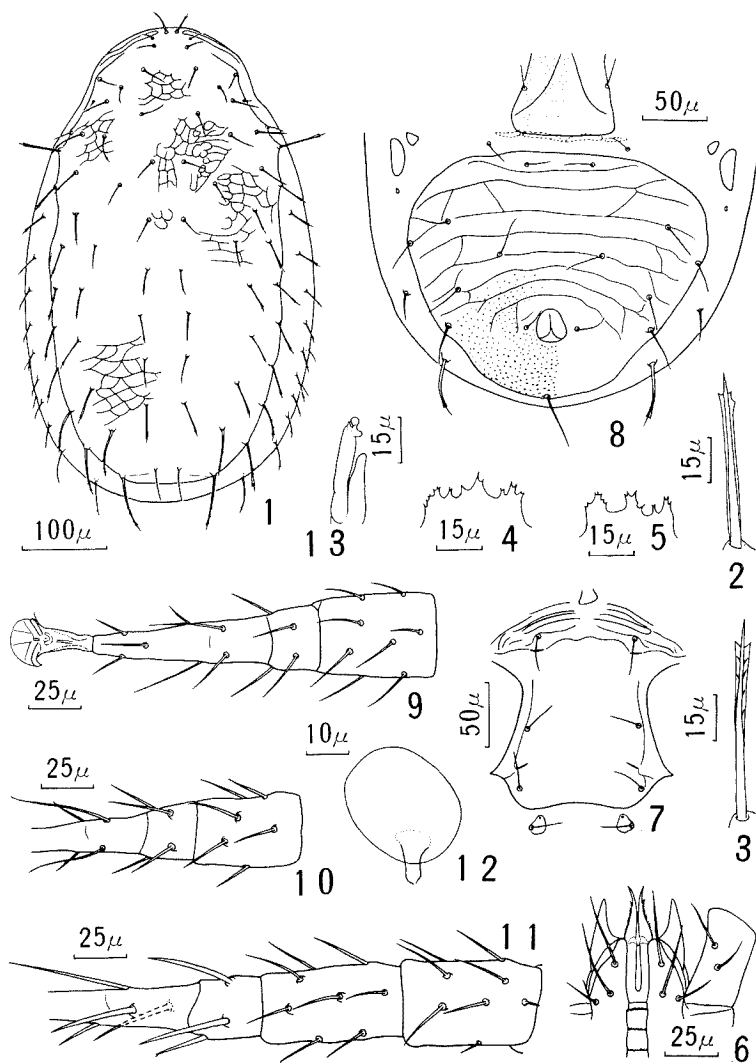
Male. Seta J₅ very short; two anterior pairs of marginal setae on dorsal shield. Ventrianal shield with five pairs of preanal setae, seta VL₁ not set on but close to this shield. Fixed digit of chelicera with about 10 teeth; the movable digit with a large tooth, the spermatophoral process as figured. Distitarsus II with a short stout seta proximally; distitarsus IV with one dorsal long, stout seta and one lateral long, slender seta; basitarsus IV with two dorsal and one ventral long, stout setae. Length of idiosoma 410 μ , width of idiosoma 250 μ .

Types. Holotype: female, Niigata, Niigata Pref., 24-II-1965 (K. SHIBATA leg.), from laboratory culture of the bulb mite, *Rhizoglyphus echinopus* (FUMOUEZ et ROBIN). Allotype: male, data same as for holotype. Paratypes: eleven females, data same as for holotype; twenty-seven females, 21-V-1965, other data same as for holotype. The types are deposited in the Zoological Institute, Faculty of Science, Hokkaido University.

Remarks. *Lasioseius japonicus* n. sp. is unique in having the well developed clunal setae (J₅) among all known members of *Lasioseius*. *L. japonicus* n. sp. is, however, relatively similar to *L. furcisetus* ATHIAS-HENRIOT, 1959 (Algeria), *L. ometisimilis* HIRSCHMANN,¹⁾ 1963 (Germany), and *L. penicilliger* BERLESE, 1916 (Europe). But, females of *L. furcisetus* are different from those of this new species in the number of the marginal setae and the position of the anterior end of the peritreme; next, females of *L. ometisimilis*²⁾ differ from them in the number

1) *L. ometisimilis*, credited to HIRSCHMANN, was originally described in WESTERBOER's article (1963).

2) WESTERBOER's drawings (1963) of *L. ometisimilis* show only 19 pairs of setae on the anterior region of the dorsal shield, but he described this species as resembling *L. ometes* (OUDEMANS, 1933) in the dorsal chaetotactic pattern, the latter bearing 21 pairs of these setae.



S. Ehara del,

of the marginal setae, the relative size of seta J_5 , and the shape of the metapodal platelets; finally, females of *L. penicilliger*¹⁾ are distinctive from them by the structure of the sternal shield and the shape of the metapodal platelets. In addition, this new species is somewhat similar to a Japanese species *L. sugawarai* EHARA, 1964, but females of the former are easily distinguished from the latter by the number of the setae on the ventrianal shield.

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Explanation of Plate V

Lasioseius japonicus n. sp.

1. Dorsum of idiosoma (♀).
2. Humeral seta (♀).
3. Seta Z_4 (♀).
- 4, 5. Tectum (♀).
6. Rostrum (♀).
7. Sternal shield (♀).
8. Posterior ventral surface (♀).
9. Tarsus and tibia II (♀).
10. Tarsus (partly shown) and tibia III (♀).
11. Tarsus (partly shown), tibia and genu IV (♀).
12. Spermatheca.
13. Male chelicera and spermatophoral process.

1) Fine redescrptions of *L. penicilliger* are given by EVANS (1958), HUGHES (1961), RACK (1962), etc.